NAME _____ CLASS _____ DATE _____

Practice

1.3 Linear Equations in Two Variables

Write an equation for the line containing the indicated points.

1. $(2, 4)$ and $(3, 5)$ _____
2. $(-1, 3)$ and $(3, -1)$ _____
3. $(3, 1)$ and $\left(\frac{1}{2}, \frac{3}{2}\right)$ _____
4. $(2, 0)$ and $(-6, 4)$ _____
5. $(-1, -4)$ and $(-2, 5)$ _____
6. $\left(\frac{1}{2}, \frac{3}{2}\right)$ and $\left(-2, -\frac{1}{2}\right)$ _____

Write an equation in slope-intercept form for the line that has the indicated slope, *m*, and contains the given point.

7. $m = 1$ and $(3, 3)$ _____
8. $m = -\frac{1}{2}$ and $(4, 6)$ _____
9. $m = \frac{3}{4}$ and $(4, -2)$ _____
10. $m = 4$ and $(4, 3)$ _____
11. $m = -2$ and $(-2, 3)$ _____
12. $m = -\frac{1}{4}$ and $(8, 6)$ _____

Write an equation in slope-intercept form for the line that contains the given point and is parallel to the given line.

13. $(1, 4); y = -3x + 2$ _____
14. $(-2, 3); y = -4x + 2$ _____
15. $(4, -2); y = \frac{3}{4}x + \frac{1}{4}$ _____
16. $(-6, 3); y = 2x + 2$ _____
17. $(2, -1); y = -3x - 6$ _____
18. $(3, -4); y = 4x - 3$ _____
19. $(2, -2); y = -\frac{1}{2}x - 3$ _____
20. $(1, -1); y = 3x - 2$ _____
21. $(2, -2); y = \frac{1}{2}x + 3$ _____
22. $(1, 0); y = -3x - 2$ _____

Write an equation in slope-intercept form for the line that contains the given point and is perpendicular to the given line.

23. $(2, 4); y = \frac{1}{2}x + 3$ _____
24. $(6, -4); y = 3x - \frac{3}{4}$ _____
25. $(6, -7); y = -2x - 5$ _____
26. $(2, -5); y = 2x - 4$ _____
27. $\left(3, \frac{11}{4}\right); y = 4x + 6$ _____
28. $(3, 5); y = -x - 1$ _____
29. $\left(1, \frac{2}{3}\right); y = \frac{3}{4}x + 3$ _____
30. $(1, 4); y = -\frac{3}{4}x - 4$ _____
31. $(3, -1); y = 3x + \frac{3}{4}$ _____
32. $\left(-1, -\frac{7}{2}\right); y = 4x - 3$ _____